12. Maintenance and Cleaning

The following points have to be considered during the inspection:

1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.

2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).

3）Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.

4）The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

CAUTION!
Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

1) Clean the inside and outside lens each week to avoid the weakneness of the lights due to accumulation of dust.

2) Clean the fan each week.

3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

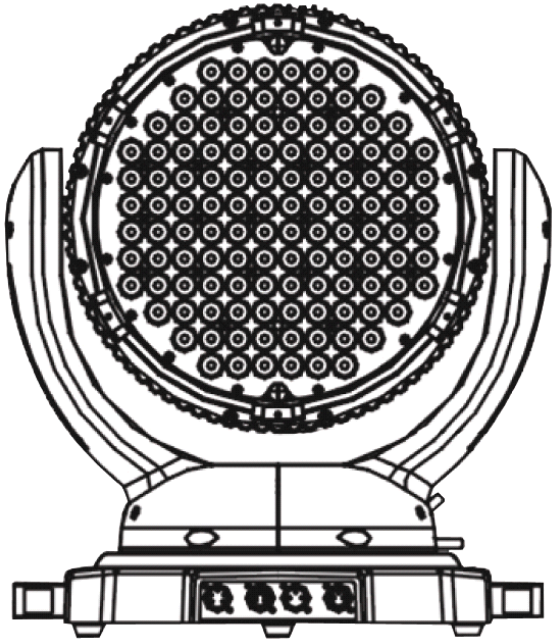
There are no serviceable parts inside the device. Please refer to the instructions under “Installation instructions”.

Should you need any spare parts, please order genuine parts from your local dealer.

CE

Black Diamond LED Moving Wash

SI-031



User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS

1. Unpacking

Thank you for Color Imagination's Black Diamond LED Moving Wash. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

Color Imagination's Black Diamond LED Moving Wash is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

SI-031 adopts 138PCS powerful 3W LEDs which features high brightness and stability. Please carefully dispack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

Moving Head---------one Signal Cable----one
Hanging Kits-------Two User Manual----one
Safety Chain---------One

10. Key Features

138PCS 3W high power LEDs (RGBW)
50,000 hours lifespan and low power consumption
8/16 bit smooth and precise resolution for PAN/TILT movement
540° pan and 280° tilt movement
Scan position memory, auto reposition after unexpected movement
RGB color mixing system
LED shutter
LED dimming
LED rainbow effect
Macros effect
Strobe effect with 18 flashes per second and pulse effect
General dimming and blackout for all four colors
16 DMX channels
DMX512, master-slave and sound activated controllable or auto operation
Blue background LCD display

11. Technical Specifications

Input Voltage: AC90-240V 50-60Hz
LED Quantities: 36 red/36 green/36 blue/30 white (3W)
Control Signal: DMX512, master-slave and sound activated or auto operation
Control Channel: 16 DMX Channels
Power Consumption: 400W
Dimensions: 446x517x432mm
Packing Dimensions: 460mm*335mm*385mm
Net Weight: 15kgs
Gross Weight: 17kgs

9. Menu Operations

DMX Addre	A001~Axxx			
Language	Chinese English			
Pan Invert	Yes	No		
Pan Angle	540	630		
Tilt Invert	Yes	No		
Mode	DMX512			
	Auto			
	SOUD			
	Slav			
Manual	CH:xx	Data:xxx		
Restore	Motor			
	Factory			

1. DMX addresses: Press MENU to select the DMX Addre option through UP/DOWN. Then press UP/DOWN to select the DMX address you would like to set. And press ENTER to set it.

2. Language: Press MENU to select the Language option through UP/DOWN. Then press UP/DOWN to select the language you would like to set. And press ENTER to set it.

3. Pan Invert: Press MENU to select the Pan Invert option through UP/DOWN. Then press UP/DOWN to select YES/NO for invert pan or not. And press ENTER to set it.

4. Pan Angle: Press MENU to select the Pan Angle option through UP/DOWN. Then press UP/DOWN to select 540 or 630. And press ENTER to set it.

5. Tilt Invert: Press MENU to select the Tilt Invert option through UP/DOWN. Then press UP/DOWN to select YES/NO for invert or not. And press ENTER to set it.

6. Mode: Press MENU to select DMX512, Auto, SOUD or Slav through UP/DOWN. Then press UP/DOWN to select one of the above. And press ENTER to set it.

7. Manual: Press MENU to select the Manual option. Then select the channels. Then select the DMX values through UP/DOWN. And press ENTER to set it.

8. Restore: Press MENU to select the Restore option. Then press UP/DOWN to select Motor/Factory. And press ENTER to set it.

2. Safety Instructions

CAUTION!
Be careful with your operations.With a dangerous voltage you can Suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this luminaries is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

3. Operation Instructions

-The moving head is for wash effect for onsite decoration purpose.

-Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.

-This light should be keep away from strong shaking during any transportation or movement.

-Don't pull up the light by only the head, or it might cause damages to the mechanical parts.

-Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.

-Make sure the installation place is in good safety condition before installing the fixture.

-Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.

-Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.

-Make sure the fixture is operated by qualified personnel who knows the fixture before using.

-Keep the original packages if any second shipment is needed.

-Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.

-It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

4. Mounting and Installation

Cautions: For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

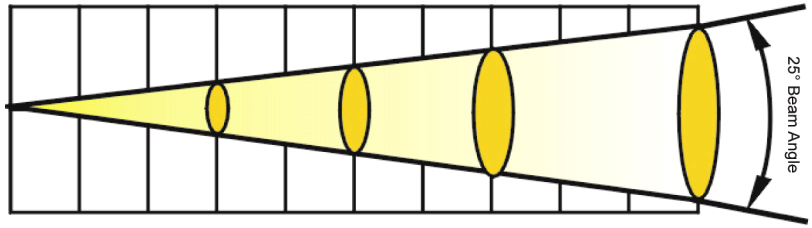
Never stand directly below the device when mounting, removing, or servicing the fixture.

		144-171	Color 5
		172-199	Color 6
		200-227	Color 7
		228-255	Color 8
10	RGB Effect	0-032	Empty
		033-064	8 colors jumping changing
		065-096	Empty
		097-128	8 colors fading changing
		129-160	Empty
		161-192	4 colors jumping changing
		193-224	Empty
		225-255	4 colors fading changing
11	Speed	0-255	Speed of RGB effect
12	Pan Fine	0-255	Linear Pan fine, 16 bit
13	Tilt Fine	0-255	Linear Tilt fine, 16 bit
14	Speed	0-255	Speed of Pan
15	Speed	0-255	Speed of Tilt
16	Reset	0-255	Auto Reset

7. Photometric Data

25 ° Beam Angle

R	1763	650	365	177	LUX
G	2840	1080	630	305	LUX
B	3980	1565	897	440	LUX
W	3040	1220	715	355	LUX
RGBW	11500	4730	2650	1230	LUX



0	3	5	7	10	Distance(m)
0	2.5	3.6	4.8	6.5	Diameter(m)

8.DMX Channels

Channel	Function	Values	Description
1	Pan	0-255	Linear PAN Movement, 540° or 630 °
2	Tilt	0-255	Linear Tilt Movement, 280 °
3	Dimmer	0-255	0-100% Linear Dimmer from dark to bright
4	Red	0-255	0-100% Red dimmer from dark to bright
5	Green	0-255	0-100% Green dimmer from dark to bright
6	Blue	0-255	0-100% Blue dimmer from dark to bright
7	White	0-255	0-100% White dimmer from dark to bright
8	Strobe	0-006	Empty
		007-127	Linear strobe from slow to fast
		128-133	Empty
		134-255	Pulse random strobe from slow to fast
9	Color	0-031	Empty
		032-059	Color 1
		060-087	Color 2
		088-115	Color 3
		116-143	Color 4

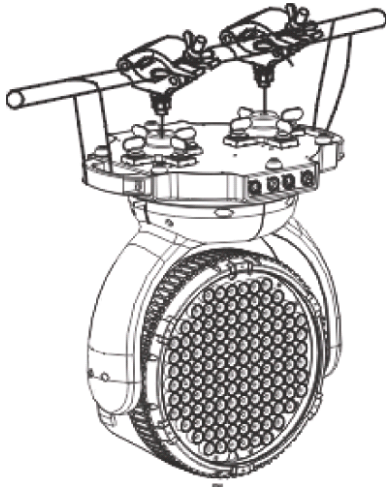
from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft) away from any flammable materials (decoration etc.).

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting points: Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting: The Moving Head wash provides a unique mounting bracket assembly that integrates the bottom of the base, the included “Hanging Kits,” and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the “omega bracket”. As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly



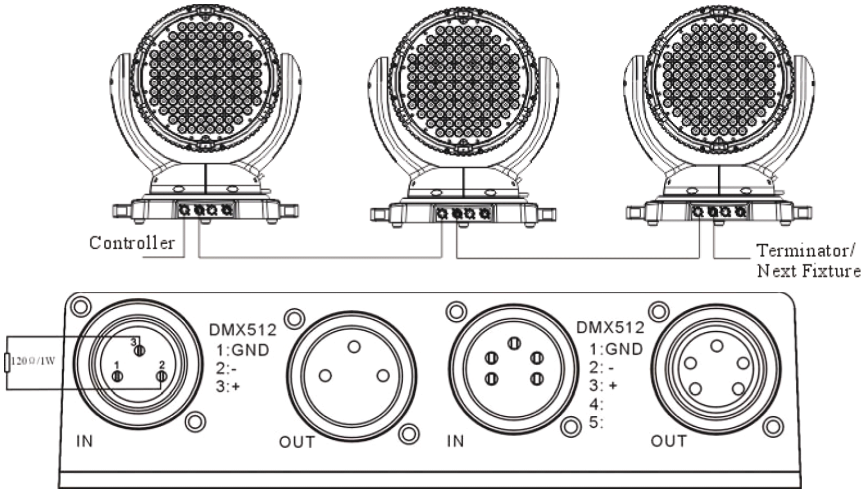
Regardless of the rigging option you choose for your wash LED, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

5. DMX-512 control connections

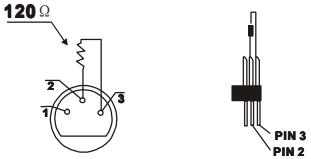
Connect the provided XLR cable to the female 3-pin or 5-pin XLR output of your controller and the other side to the male 3-pin or 5-pin XLR input of the moving head. You can chain multiple

Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX-512 connection with DMX terminator

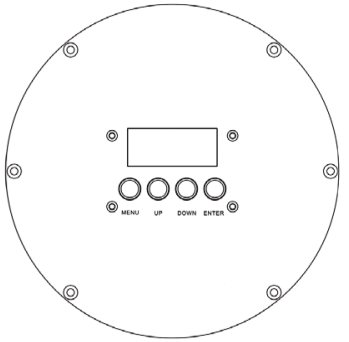


For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.

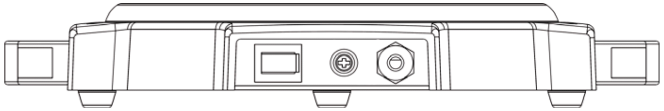


6. Over Views and Dimensions

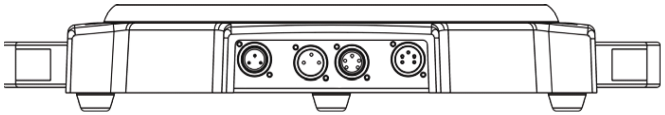
View of Back Panel



View of Power Panel



View of XLR Panel



Overall Dimensions